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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,556	08/28/2001	Hyun-Don Oh	SEC.836	3479

7590 09/03/2003

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EXAMINER

GEYER, SCOTT B

ART UNIT	PAPER NUMBER
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2829

DATE MAILED: 09/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/939,556

Applicant(s)

OH ET AL.

Examiner

Scott B. Geyer

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 6-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The previous notice of allowable subject matter for claims 1, 3 and 8-12 is hereby withdrawn. A new rejection for all pending claims is presented below. Due to the newly cited reference and rejection, this action is non-final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4 and 7-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Hasebe et al. (5,826,129).

3A. As to claim 1, Hasebe et al. teach a semiconductor fabricating apparatus which has an adhesion unit and a bake unit (see figure 4). The adhesion unit has a chamber (figure 22, numeral 328a) to introduce (i.e. supply) an adhesion enhancing material, namely HMDS. The bake unit is installed at a position higher than the adhesion unit, as is seen in figure 4. The semiconductor fabricating apparatus also has means by which clean air is blown downward from the bake unit to the adhesion unit, as can be seen in figures 5 and 6.

3B. As to claim 4, Hasebe et al. teach a semiconductor fabricating apparatus which has an adhesion unit and a bake unit (see figure 4). The adhesion unit has a chamber (figure 22, numeral 328a) to introduce (i.e. supply) an adhesion enhancing material, namely HMDS. The adhesion unit is installed at a first position and the bake

unit is installed at a second position, as is seen in figure 4. The semiconductor fabricating apparatus also has means by which clean air is blown downward from the bake unit to the adhesion unit, as can be seen in figures 5 and 6.

3C. As to claim 7, Hasebe et al. teach the bake unit (second position) is installed at a position higher than the adhesion unit (first position), as is seen in figure 4.

3D. As to claim 8, Hasebe et al. teach a semiconductor fabricating method which has an adhesion unit and a bake unit (see figure 4), wherein a wafer first is treated in an adhesion unit (AD) (see figure 4) which uses HMDS and then the wafer is treated by heating in a bake unit (POBAKE). The semiconductor fabricating method also has clean air which is blown downward from the bake unit to the adhesion unit, as can be seen in figures 5 and 6. The adhesion step is performed before the bake step.

3E. As to claim 9, Hasebe et al. teach the adhesion unit has a chamber (figure 22, numeral 328a) to introduce (i.e. supply) an adhesion enhancing material, namely HMDS. The second step, in the bake unit, is baking.

3F. As to claim 11, Hasebe et al. teach the bake unit (second position) is installed at a position higher than the adhesion unit (first position), as is seen in figure 4.

3G. As to claim 12, Hasebe et al. teach a second process, of baking, performed after a first step, of processing in the adhesion unit.

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4. Claims 3, 6 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Hasebe et al. (5,826,129), as evidenced by the applicant's admitted prior art.

Hasebe et al. teach HMDS used in the adhesion unit of the semiconductor manufacturing method/apparatus (column 12, line 65); applicant has acquiesced that ammonia is generated by use of HMDS in an adhesion unit of a semiconductor manufacturing method/apparatus.

Conclusion

5. This action is non-final.

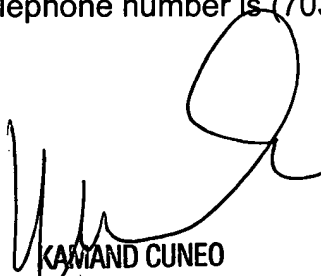
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott B. Geyer whose telephone number is (703) 306-5866. The examiner can normally be reached on weekdays, between 10:00am - 6:30pm. E-mail: scott.geyer@uspto.gov

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (703) 308-1233. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

SBG

SBG
August 21, 2003


KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800